APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,289	01/26/2004	Tetsuya Shirogane	16869N-103900US	2560

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EXAMINER
MORAN, RANDAL D

ART UNIT	PAPER NUMBER
2135	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
Office Action Summary		10/765,289	SHIROGANE, TETSUYA
		Examiner	Art Unit
		Randal D. Moran	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 July 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-16,20-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-16 and 20-22* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-16, 20-22 are pending in this application.

2.   This action is a response to amendment filed 7/6/2007.

3.   Below, Examiner has pointed out particular references contained in the prior art(s) of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claims, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully each reference in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Claim Objections

1.   The objections to **Claims 1, 6, and 7** for lack of antecedent basis are withdrawn in view of amendment filed 7/6/2007.

Claim Rejections - 35 USC § 112

1.   The rejections of **Claims 1-9, 16, and 22** under 35 USC 112 are withdrawn in

view of amendment filed 7/6/2007.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   **Claims 1-16 and 20-22** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Grosner et al. (US 2004/0044744)**, hereafter "Grosner" in view of

Davis et al. (US 6,088,450), hereafter "Davis".

3.   Considering **Claim 1, 10, and 22,** Grosner discloses a storage apparatus for

processing a command transmitted by a host computer connected to said

storage apparatus by a network, said storage apparatus comprising: a storage

unit for storing data to be processed in accordance with said command; a

memory for holding an access management table for storing first information on

identification of said host computer; and a second determination means for

carrying out a second determination process on the first information transmitted

by said host computer in response to the request issued by said request means

and determining if the first information indicates the login request should be

approved by examination of said access management table to produce a

determination result; wherein a decision as to whether or not to approve the login

request is made in accordance with the determination result output by said

second determination means (abstract, [0017]-[0024], [0074]-[0081], [0213]-

[0216], as provided by the applicant in petition to make special on 7/5/2005).

Grosner does not disclose a first determination means for carrying out a first

determination process and determining whether or not a frame of a login request

transmitted by said host computer includes second information on identification

of said host computer; a request means for transmitting a request to a source

address specified in the frame of the login request in order to request said host

computer to transmit the first information on identification of said host computer

in a case where the determination result output by said first determination means

indicates that the frame of the login request does not include the desired second

information.

Davis does disclose a first determination means for carrying out a first

determination process and determining whether or not a frame of a login request

transmitted by said host computer includes second information on identification

of said host computer (Fig. 5- item 400-410, column 6- lines 13-25, the security

device would request a password (first information) and upon receiving the

password, no second information is available); a request means for transmitting a

request to a source address specified in the frame of the login request (Fig. 5-

item 415, column 6- lines 26-29) in order to request said host computer to

transmit the first information on identification of said host computer in a case

where the determination result output by said first determination means indicates

that the frame of the login request does not include the desired second

information (Fig. 5- item 415-435, column 6- lines 29-50).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Grosner by a challenge-response

protocol for authentication as taught by Davis in order to increase the security of

the authentication process. A challenge response protocol mitigates the

likelihood of unauthorized use of an electronic device through periodic

challenge/response messages (Davis- column 1- lines 24-29). The challenge-

response type of authentication is suggested in Grosner, though not taught in

detail ([0264], [0459]).

4.   Considering **Claim 20,** Grosner discloses a command-processing method for

carrying out a communication between a first apparatus having an iSCSI initiator

and a second apparatus having an iSCSI target through an IP network, said

command-processing method comprising: receiving a frame of a login request

made by said first apparatus in said second apparatus; checking whether or not

an access made by said first apparatus is to be permitted by examination of said

second predetermined information transmitted by said first apparatus to said

second apparatus; and processing a command transmitted by said first

apparatus to said second apparatus in said iSCSI target of said second

apparatus in a case where a result of checking indicates that an access made by

said first apparatus as an access to said second (abstract, [0017]-[0024], [0074]-

[0081], [0213]-[0216], as provided by the applicant in petition to make special on

7/5/2005).

Grosner does not disclose checking whether or not said frame includes first

predetermined information for identifying said first apparatus; issuing a request

from said second apparatus for acquisition of second predetermined information

for identifying said first apparatus from said first apparatus in a case where said

frame does not include said first predetermined information.

Davis does disclose checking whether or not said frame includes first

predetermined information for identifying said first apparatus (Fig. 5- item 400-

410, column 6- lines 13-25, the security device would request a password

(second information) and upon receiving the password, no second information is

available); issuing a request from said second apparatus for acquisition of

second predetermined information for identifying said first apparatus from said

first apparatus in a case where said frame does not include said first

predetermined information (Fig. 5- item 415-435, column 6- lines 26-50).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Grosner by a challenge-response

protocol for authentication into a storage unit as taught by Davis in order to

increase the security of the authentication process. A challenge response

protocol mitigates the likelihood of unauthorized use of an electronic device

through periodic challenge/response messages (Davis- column 1- lines 24-29).

The challenge-response type of authentication is suggested in Grosner, though

not taught in detail (Grosner- [0264], [0459]).

5.   Considering **Claim 2,** the combination of Grosner and Davis discloses an access

is made to said storage unit by adoption of an iSCSI protocol (Grosner- Fig. 8-

item 804, [0818] lines 7-10).

6.   Considering **Claim 3 and 11,** the combination of Grosner and Davis discloses

the first information stored in said access management table is an MAC address

of an interface with an IP network through which said host computer is connected

to said storage apparatus and an IP address is used as the second information

(Grossner- [0459]).

7.   Considering **Claims 4, 14, and 21,** the combination of Grosner and Davis

discloses storage apparatus further having an SNMP manager for monitoring an

apparatus connected to said IP network, and wherein said SNMP manager

transmits a frame, which is used for requesting said host computer to transmit

the first information, as an SNMP request for requesting said host computer to

transmit an MIB of an interface related to said host computer (Grossner- Fig. 33,

[0024], [0092] lines 19-20, [0575]).

8.   Considering **Claim 5,** the combination of Grosner and Davis discloses a console

used for changing a content of said access management table (Grossner- [0132],

[0428]-[0429], changing the configuration of the IP subnet masks with change the

contents that are added to the table, Grossner- [0541], Fig. 32, [0582], [0583])).

9.   Considering **Claims 6 and 13,** the combination of Grosner and Davis discloses if

the determination result produced by said second determination means indicates

that the first information for identifying said host computer is not stored in said

access management table, a content of said login request is stored in said

memory as log data (Grossner- [0512], [0518]-[0536]).

10.   Considering **Claim 7,** the combination of Grosner and Davis discloses if the

determination result produced by said second determination means indicates that

the first information for identifying said host computer has been stored in said

access management table (Grossner- [0459]- lines 1-6), a source IP address of

the login request is stored in said access management table, being associated

with said information for identifying said host computer (Grossner- [0459] lines 6-

12).

11.   Considering **Claim 8,** the combination of Grosner and Davis discloses access

management table is used for cataloging a MAC address and an identification

code for identifying a logical unit (LU) accessible to a host computer having an

IP-network interface identified by the MAC address (Grossenr- [0188], [0189]);

and prior to processing of a command received from said host computer, an

access requested by the command is examined to determine whether or not the

access is an access to an accessible logical unit and the command is processed

only if the access is found out to be an access to an accessible logical unit

(Grossner- [0208],[0209]).

12.   Considering **Claim 9,** the combination of Grosner and Davis discloses access

management table includes information comprising an IP address assigned to a

host computer having an IP-network interface identified by a MAC address as an

address associated with the MAC address (Grossner- [0459]).

13.   Considering **Claim 12,** the combination of Grosner and Davis discloses preparing

a table, which is used for cataloging first information for identifying an external

apparatus allowed to make accesses to said storage apparatus (Grossner-

[0457]); wherein, in said second determination process, first information acquired

from an external apparatus is checked by referencing said table in determination

of whether or not an access permit should be given to said external apparatus

(Grossner- [0457], [0459]).

14.   Considering **Claim 15,** the combination of Grosner and Davis discloses a MAC

address is obtained from said external apparatus by adoption of a protocol based

on an iSCSI text mode negotiation (Grossner- [0090]- lines 6-13, [0459]).

15.   Considering **Claim 16,** the combination of Grosner and Davis discloses defining

a plurality of logical units (LUs) in said storage apparatus (Grossner- [0455]);

preparing an access management table for storing a MAC address and an

identification code for identifying one of said logical units, wherein the identifiable

logic unit is accessible to an external apparatus having an IP-network interface

identified by said stored MAC address (Grossner- [0459]); and determining

whether or not an access requested by a command transmitted by an external

apparatus is an access to a specific one of said logical units, having an

identification code cataloged in advance in said access management table

(Grossner- [0457], [0458]), in a third determination process after said second

determination process; wherein said command is processed if a result of said

third determination process indicates that said access requested by said

command is an access to said specific accessible logical unit (Grossner- [0457],

[0458] accessing the webpage would be executing the command).

Response to Arguments

1.   Applicant's arguments filed 7/6/2007 have been fully considered but they are not

persuasive.

2.   In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Grossner does

suggest that a client is required to log on to a server using a simple password

authentication or a more secure cryptographic challenge ([0264]). So while not going

into detail of the specific types of challenges, one of ordinary skill in the art with the

knowledge of Davis would be motivated to combine the two in order to increase the

security of the authentication process. A challenge response protocol mitigates the

likelihood of unauthorized use of an electronic device through periodic

challenge/response messages (Davis- column 1- lines 24-29).

3.   In response to applicant's argument that there is no reasonable expectation of

success, the test for obviousness is not whether the features of a secondary reference

may be bodily incorporated into the structure of the primary reference; nor is it that the

claimed invention must be expressly suggested in any one or all of the references.

Rather, the test is what the combined teachings of the references would have

suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981).

4.   In response to the applicant's argument that Grossner does not teach all of the

claimed limitations. Examiner acknowledges that the cited reference does not disclose

all the limitations in the claims. However, Grossner in view of Davis does disclose all

the limitations recited in the claims. Reasons and motivation for combining the two

references is given above.

Conclusion

1.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

2.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Randal D. Moran whose telephone number is 571-270-

1255. The examiner can normally be reached on M-F: 7:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Randal D. Moran
/RDM/

7/23/2007
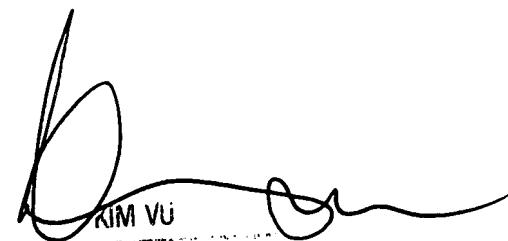
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